

Patent Claims

1. A computer-aided method for automated risk
5 parameter identification and/or characterization, where
relative risk values for a multiplicity of products
and/or populations are determined, characterized
in that product and/or population data records stored
accessibly in databases (2) are taken as a basis for
10 generating a lookup table (4) containing risk
parameters,
in that a filter module (3) is used to store risk
classes in association with the product and/or
population data records on the basis of the risk
15 parameters from the lookup table (4),
in that an analysis module (1) is used to generate at
least one expected value for a probability of
occurrence of a definable risk event for each risk
class and to store it in association with the risk
20 event,
in that a normalization module (5) is used to normalize
the expected value for the respective risk class on the
basis of an average rate of occurrence of the event for
the product and/or population data records to produce a
25 relative occurrence parameter, and
in that the analysis module (1) is used to produce a
risk characterization value for the respective risk
class on the basis of the comparison of the relative
occurrence parameters, with the risk characterization
30 value determining the probability of occurrence of the
risk event.

2. The method as claimed in claim 1, characterized in
that, for a specific combination of risk classes, a
35 risk characterization value is determined using the
analysis module (1) and is compared with available
empirical data records for the purpose of
characterizing the product and/or the population, where

only typical risk characterizations situated within a definable threshold value are associated with the risk class.

5 3. The method as claimed in either of claims 1 and 2, characterized in that one or more of the risk classes have an associated multiplicity of risk parameters, where the method is repeated with the risk parameters modified and the deviations from the expected values
10 are stored in association with the risk classes.

4. The method as claimed in one of claims 1 to 3, characterized in that the analysis module (1) is used to determine correlation factors between the risk
15 parameters on the basis of the population data files divided into risk classes and to store them in association with the relevant risk parameters.

5. The method as claimed in one of claims 1 to 4,
20 characterized in that one or more threshold values are used to allocate each risk parameter a relevance flag for a particular population and/or product.

6. The method as claimed in one of claims 1 to 5,
25 characterized in that the lookup table (4) containing risk parameters is generated at least partly dynamically on the basis of product and/or population data records stored accessibly in databases (2).

30 7. The method as claimed in one of claims 1 to 6, characterized in that for secondary risk groups at least one separate relative occurrence parameter is generated.

35 8. The method as claimed in one of claims 1 to 7, characterized in that when the data are compared with the empirical data stored in relevant memory units (6) the data, if situated outside of a determinable

fluctuation tolerance, are aligned with the empirical data.

9. The method as claimed in one of claims 1 to 8,
5 characterized in that the risk parameters comprise at least the relative mortality risks.

10. The method as claimed in one of claims 1 to 9,
characterized in that new risk classes are produced
10 dynamically on the basis of at least parts of the relative occurrence parameters.

11. The method as claimed in one of claims 7 to 10,
characterized in that the secondary risk groups
15 comprise at least sex and/or age of occurrence and/or smoker/non-smoker and/or policy duration.

12. A computer-aided system for automated
determination of relative risks which are linked to a
20 multiplicity of financial products, comprising:

- a) means for identifying one or more risk classes which are associated with the multiplicity of financial products;
- b) means for determining an expected rate of
25 occurrence for each risk class;
- c) means for dividing the expected rates of occurrence by an average rate in order to determine a relative risk ratio for each risk class; and
- d) means for comparing the relative risk ratios for
30 the purpose of characterizing the relative risks linked to the multiplicity of products.

13. The computer-aided system as claimed in claim 12,
characterized in that said one or more risk classes are
35 associated with one or more criteria, and which additionally has means for modifying one or more criteria and for recalculation of the relative risk

ratio for determining an effect of said modification on the relative risks which are linked to the products.

14. The computer-aided system as claimed in either of
5 claims 12 and 13, characterized in that one or more of said risk classes are linked to different criteria, and in which said relative risk ratios are used for comparing said risk classes.

10 15. The computer-aided system as claimed in one of claims 12 to 14, characterized in that it comprises means for applying the relative risk ratio to redefining one or more of said risk classes.

15 16. The computer-aided system as claimed in one of claims 12 to 15, characterized in that it comprises means for determining a separate relative risk ratio for risk subgroups.

20 17. The computer-aided system as claimed in one of claims 12 to 16, characterized in that for use in determining the relative risk ratios it comprises means for storing data which relate to the predominance of criteria which are linked to said risk classes.

25 18. The computer-aided system as claimed in one of claims 12 to 17, characterized in that it comprises means for comparing the predominance data with empirical industrial data for particular combinations
30 of criteria and means for aligning the stored data with the empirical data.

19. The computer-aided system as claimed in one of
35 claims 12 to 18, characterized in that it comprises means for storing data which relate to the expected rates of occurrence for the purpose of use when determining the relative risk ratios.

20. The computer-aided system as claimed in one of claims 12 to 19, characterized in that it comprises means for comparing the stored data with empirical industrial data and means for aligning the stored data
5 with the empirical data.

21. The computer-aided system as claimed in one of claims 12 to 20, characterized in that the one or more risk classes are associated with at least one
10 criterion, and also containing means for using the relative risk ratio to determine the effect which the inclusion in a risk class of one or more risks which do not meet one or more criteria linked to this risk class has on this risk class.